

## REMARKS

Claims 1-19 are pending in the present application.

Claims 1-19 are believed to be in condition for allowance for the reasons set forth herein.

### Claim Rejections - 35 USC § 103

Claims 1-3, 5-10 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. in view of USPN 6,455,133 to Furukawa et al.

Mochizuki et al. is cited as disclosing the combination of compounds and solids set forth in paragraph 5 of the Action.

Applicants note that the Office has abandoned the previously inconsistent position related to the combination of a solid and a polymer forming a copolymer and now stands by the position that Mochizuki et al. does not expressly disclose a hydrolyzed copolymer of vinylacetate and silane monomer. Applicants agree with this position.

Furukawa et al. is cited as teaching ink jet imaging sheets useful in ink jet recording using hydrolates of copolymers of vinyl ester such as vinyl acetate in the ink receiving layer. Furukawa et al. is also cited as teaching silane monomers and crosslinking monomers of various

vinyltrimethoxysilanes. The Office then concludes that it would have been obvious to one of ordinary skill in the art to combine a hydrolyzed copolymer of vinylacetate and silane monomer to the ink jet sheet of Mochizuki et al.

Applicants respectfully disagree with the conclusion that Furukawa et al. teaches a hydrolyzed copolymer of vinylacetate and silane monomer. Based on the failure of Furukawa et al. to teach the copolymer of vinylacetate and silane monomer Applicants respectfully submit that the rejection is improper.

Furukawa et al. discloses an ink receiving layer comprising three components, specifically, a cationic polymer a hydrophilic polymer and a particulate lubricate. The hydrophilic polymer can be a vinylalcohol or vinyl acetate copolymer (col. 5 lines 16-21) wherein the co-monomers are used to introduce polyoxyalkylene units, acetoacetyl groups, carboxyl groups, acid anhydride groups and/or amino groups. A silane monomer is not disclosed as a co-monomer for the hydrophilic polymer.

The cationic polymer may comprise a cationic monomer (col. 6, line 48 to col. 7 line 3), a crosslinking silane monomer (col. 7, lines 11 to 59), a hydrophilic monomer (col. 7 line 60 to col. 8 line 28) and a non-ionic monomer (col. 8, line 32 to 47). The hydrophilic monomer can be a hydroxyl group-containing monomer (col. 8, lines 5-6), more

specifically a hydroxyl C<sub>2</sub>-C<sub>6</sub> alkyl ester of (meth)acrylic acid. A vinylalcohol or hydrolyzed vinylacetate monomer is not disclosed. The non-ionic monomer may be a vinyl acetate monomer (col. 8 line 43) but a hydrolyzed monomer is not disclosed.

Furukawa et al. discloses either a hydrolyzed vinylacetate copolymer for the hydrophilic polymer or a non-hydrolyzed vinylacetate-silane copolymer for the cationic polymer. Furukawa et al. does not teach a hydrolyzed vinylacetate-silane copolymer. One of skill in the art would have no basis for considering the use of a hydrolyzed copolymer of vinylacetate and silane monomer in an inkjet receiving layer of Mochizuki et al. based on Furukawa et al. This is especially true since Furukawa et al. does not teach the hydrolyzed copolymer of vinylacetate and silane monomer.

The Office has read into Furukawa et al. teachings which are not found therein. The reading can only be based on a hindsight reconstruction from the present application. Even then, the Office has combined components in a way which is inconsistent with Furukawa et al. in an effort to derive those elements which are only found in the instant claims. Applicants respectfully submit that this is an improper basis for a rejection and withdrawal is respectfully requested.

Applicants respectfully request that the rejection of claims 1-3, 5-10 and 17-18 under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. in view of USPN 6,455,133 to Furukawa et al. be withdrawn as improper. The rejection is traversed

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. in view of USPN 6,455,133 to Furukawa et al. and further in view of USPN 5,853,540 to Niemoller et al.

Mochizuki et al. and Furukawa et al. are discussed supra and all comments are equally relevant herein. In summary, Furukawa et al. fails to teach the hydrolyzed copolymer of vinylacetate and silane monomer and the combination of Mochizuki et al. and Furukawa et al. fails to teach the invention as set forth in claims 1-3.

The Office states that Mochizuki et al. fails to disclose amorphous silica having the particle size stated in claim 4.

Niemoller et al. is cited as disclosing a water-resistant recording material wherein contained therein are silica particle size of claim 4. Claim 4 depends from claims 1-3 and further limits claims 1-3.

Mochizuki et al. and Furukawa et al. fail to obviate claims 1-3 for the reasons set forth above. Niemoller

provides no additional teaching to mitigate the deficiencies of Mochizuki et al. and Furukawa et al. and therefore the rejection is improper.

Applicants respectfully request that the rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. in view of USPN 6,455,133 to Furukawa et al. and further in view of USPN 5,853,540 to Niemoller et al. be withdrawn due to the failure of the combination of references to teach, or even suggest, the claimed invention. The rejection is traversed.

Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. in view of USPN 6,455,133 to Furukawa et al. and further in view of USPN 6,022,440 to Nordeen et al.

Nordeen et al. is cited as teaching an adhesive polymer dispersed between the support and ink receiving layer.

Claims 11-15 ultimately depend from claim 1 and further limit claim 1. Nordeen et al. fails to mitigate the deficiencies of Mochizuki et al. and Furukawa et al. with regards to the failure to teach a hydrolyzed copolymer of vinylacetate and silane monomer. The combination therefore also fails to obviate claims 11-15.

Applicants respectfully request that the rejection of claims 11-15 under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. in view of USPN 6,455,133 to Furukawa et al. and further in view of USPN 6,022,440 to Nordeen et al. be withdrawn. The rejection is traversed.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. as applied to claim 1 above, and further in view of USPN 6,214,458 to Kobayashi et al.

Claim 16 depends from claim 1 wherein the limitation of a hydrolyzed copolymer of vinylacetate and silane monomer is recited. The Office has previously stated that Mochizuki et al. fails to teach the hydrolyzed copolymer of vinylacetate and silane monomer.

Kobayashi is cited as teaching the high glossy opaque support. Kobayashi is silent with regards to a hydrolyzed copolymer of vinylacetate and silane monomer.

In response to the previous action Applicants respectfully requested clarification regarding the inclusion of Furukawa et al. in this rejection. The Office has failed to clarify the rejection and has returned the same rejection without regard for the request. Applicants respectfully

request that the rejection be clarified such that a complete response can be prepared without Applicant having to guess what position the Office is taking.

If the Office intended to include Furukawa et al. in this rejection the rejection is still traversed for the reasons entered supra.

Applicants respectfully request that the rejection of Claim 16 under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. as applied to claim 1 above, and further in view of USPN 6,214,458 to Kobayashi et al. be withdrawn as being improper. The rejection is traversed.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mochizuki et al. in view of Furukawa et al. and further in view of Mukoyoshi et al.

Mochizuki et al. in view of Furukawa et al. has been discussed supra and all comments are equally applicable herein. In summary, Furukawa et al. fails to teach, or even suggest, a hydrolyzed copolymer of vinylacetate and silane monomer. The combination of Mochizuki et al. and Furukawa et al. therefore fail to obviate the claimed subject matter.

In addition to the deficiencies of Mochizuki et al. and Furukawa et al. in teaching the hydrolyzed copolymer of

vinylacetate and silane monomer the combination also fails to recite the additional inclusion of dimethylamine-epichlorohydrine copolymer. Mukoyishi is cited as providing those teachings which are otherwise lacking in Mochizuki et al. and Furukawa et al.

Mukoyishi fails to mitigate the deficiency of the primary references and therefore, even with Mukoyishi, there is no teaching of a hydrolyzed copolymer of vinylacetate and silane monomer. The rejection is therefore improper.

Applicants respectfully request that the rejection of claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mochizuki et al. in view of Furukawa et al. and further in view of Mukoyoshi et al. be withdrawn. The rejection is traversed.

#### Further Comments

In the "Response to Arguments" the Office has stated that Applicants have failed to submit objective evidence to show why Furukawa et al. does not teach a hydrolyzed copolymer of vinylacetate and silane monomer even though the same starting materials are listed in Furukawa et al. Applicants respectfully disagree.

In the arguments presented supra Applicants specifically set forth the compounds arrived at by the teachings of



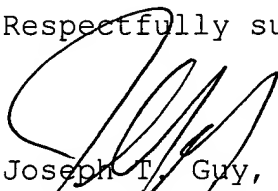
Furukawa et al. The allegation by the Office that a reference which comprises the starting compounds also teaches a copolymer which is also further modified is inconsistent with 35 U.S.C. 112, second paragraph, since there is no teaching which enables one of skill in the art to combine the starting materials in such a way as to form the specific material claimed.

Applicants stand firm in the position that Furukawa et al. fails to teach the hydrolyzed copolymer of vinylacetate and silane monomer and that the Office has improperly chosen select starting materials from different eventual polymers to combine in a way which is only suggested in the instant application. A rejection based on such a hindsight reconstruction is improper and withdrawal of the rejections is proper and anticipated.

## CONCLUSIONS

Claims 1-19 are pending. All claims are in condition for allowance. Notice thereof is respectfully requested.

Respectfully submitted,



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